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ABSTRACT

This pilot study assessed the levels of stress of 90 refugee children aged 7 to 12 years. The countries of origin were El Salvador and Nicaragua; the countries of asylum were Costa Rica, Honduras, and Nicaragua. Parents and teachers assessed each child by means of a questionnaire. Parents completed a second questionnaire which contributed background information about children's experiences. Results indicated a high correlation between teacher and parent assessments. Teachers reported that children exhibited learning problems, and some children exhibited antisocial behavior. Results also indicated that: (1) children exhibited psychosomatic symptoms of stress and a need for reassurance; (2) children who had experienced civil violence had higher levels of stress than children who had not; (3) stress levels increased with family size; (4) some stress-causing factors, such as the experience of civil violence combined with poor living conditions in the country of asylum, had an interactive effect on each other; and (5) children's experience of civil violence over a long period of time had long-term consequences for their development. Nine references are cited. Appendixes include English language versions of the parent and teacher questionnaires, a list of changes made for the English versions of the questionnaires, the background information questionnaire, and presentations of the statistical data from the study. (BC)

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INTERNATIONAL CATHOLIC CHILD BUREAU.

REPORT OF A PILOT STUDY TO ASSESS LEVELS OF STRESS IN A SAMPLE OF 90 REFUGEE CHILDREN IN CENTRAL AMERICA.

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ABSTRACT OF REPORT.

A pilot study was carried out in Central America to assess the levels of stress manifested by a group of 90 refugee children aged 7 to 12 years. Parents and teachers assessed the children independently using questionnaire schedules designed for use with populations of refugee children. Parents also completed a second questionnaire which contributed certain demographic data, and information about the child's experiences. The countries of origin were El Salvador and Nicaragua. The countries of asylum were Costa Rica, Honduras and Nicaragua. The major findings of the study are as follows.

1. Overall levels of stress experienced by the children are unacceptably high. Their behaviour is characterised as fearful and anxious, particularly with regard to concerns for their personal security and the security of their families; they exhibit psychosomatic symptoms of stress, such as complaining of aches and pains, and shaking and fast heartbeat; they exhibit a need for affection and reassurance and appear disinterested in their surroundings. The independent assessment of the children by the parents and teachers revealed a very high level of agreement for those items that were common to both questionnaires, indicating a consistency in the children's behaviour. Additionally, teachers reported that the children experienced learning problems and difficulties with memorising daily routines, with a certain number exhibiting antisocial behaviour and difficulties relating to other children.

2. The experience of civil violence appears to raise the levels of stress that the children are experiencing. Salvadoran children in Nicaragua, for example, who had experienced a 'house search' exhibited higher levels of stress than their peers who had not experienced this form of civil violence. The Nicaraguan children in Honduras, who had most frequently witnessed civil violence, were the group exhibiting the highest levels of stress on the questionnaires.

3. Larger family size, in terms of the presence of an adult(s) in addition to the nuclear family, had an effect in terms of significantly increasing levels of stress.

4. Certain variables appear to have an interactive effect upon each other. Most noticeable was the effect of the experience of civil violence combined with living conditions and country of asylum that was evident in the Nicaraguan children in Honduras. This interaction between

different 'stress-provoking' conditions indicates that the stress experienced by the children is a cumulative function of a number of negative factors that reflect the complexity of the situation of forced migration. Whilst it is important to assess the effect of significant events such as civil violence, attention should be paid to other less obvious features in the child's environment and experience which may be less evident, but also contributory in terms of affecting levels of stress.

5. Perhaps the most significant factor to emerge from the study was that of time. All but ten of the children had been refugees for more than two years, the majority for four to six years. If the questionnaires are accurately reflecting levels of stress, then it would appear that the overall impact of the refugee experience is having extremely negative effects upon these children, with serious long-term consequences for their social, emotional and educational development.

Further large-scale studies are recommended to assess the impact of their experiences upon refugee children, which will provide guidelines for appropriate forms of intervention that are based upon an informed assessment of the ways in which particular conditions and events affect different populations.

INTRODUCTION.

In September 1986 the International Catholic Child Bureau (ICCB) prepared a research proposal outlining a procedure to assess the extent to which refugee children were manifesting symptoms of stress. The proposal was presented at the meetings of the International Council of Voluntary Agencies. Interested agencies were invited to collaborate with the ICCB in collecting data on this issue. The ICCB accepted responsibility for the design of the study, funding for the data collection and translation and interviewing costs, and subsequent data analysis. The United Nations High Commissioner for Refugees (UNHCR) expressed interest in the project and requested a number of offices to assist, where possible, with the data collection. To date studies have been completed with the assistance of the UNHCR offices in Botswana and Costa Rica. This document describes the study and the results of the pilot project in Costa Rica. Following the initial request from UNHCR in Geneva, their office in Costa Rica made contact with the Confederacion Universitaria Centroamericana (CSUCA) and advised them of the proposed study. CSUCA expressed an interest in collaborating with the project and subsequently the ICCB funded them to arrange for translations of the assessment instruments used in the study and to carry out the data collection.

The proposal included a questionnaire schedule describing various behaviours that one might expect children under stress to manifest. It is in two versions - one for parents, and another for teachers. Much consideration was given as to whether in the study we would use any existing standardised instrument for which normative data are available. Such instruments as are available have generally been standardised on populations in Europe or North America and one cannot assume that all the items will have applicability across widely differing cultures. In addition, we thought it would be informative to include certain items that related directly to the refugee experience which would not be found on an instrument standardised on children in Western cultures.

Given that the original proposal was intended to have a wide cross-cultural application within refugee communities outside these geographical areas, it was decided to opt for the alternative methodology in cross-cultural psychological research viz. to produce a new instrument which could be modified according to the understanding different cultures have of the behaviour domain being investigated. It was felt to be most important to try and understand from within the refugee communities who would participate in the study how the adult refugees interpreted 'stress - related behaviours' in their children. At the outset it was intended that, following translation, the items on the

questionnaire should be fully discussed with a group of adult refugees to determine their applicability within each particular culture. Those items considered inappropriate could be changed or deleted, and others added which the refugees considered better described behaviours that children under stress would be likely to manifest. In this way one can then see which concepts are shared between cultures and which are culture specific. By using an existing instrument one would be eliminating the possibility of access to culture specific concepts. The aim of the study was not only to measure the incidence of stress - related behaviours amongst refugee children but also to understand how stress in children was interpreted within the cultures of the refugee communities, and what factors, or combinations of factors, would have predictive value in terms of identifying particularly vulnerable children. It is intended that such information be incorporated into the design of appropriate intervention programmes for the children as a second stage of the project to alleviate the negative effects of the refugee experience on the child's development.

Also included in the proposal was a background information sheet to be completed for each child. This requests information on such factors as the country of origin and country of asylum, family situation, living conditions, reasons for flight, cultural proximity of the host community etc. This is intended to serve as a source of descriptive statistics for each population, and also as a means of assessing the extent to which responses on the questionnaire schedule might be influenced by specific situations that the child has experienced.

The report that follows outlines the way the above design was implemented in the initial pilot study in collaboration with CSUCA in Costa Rica. To the extent that its 'audience' will be primarily personnel from international and non-governmental agencies, and not necessarily psychologists and other social scientists, every effort has been made to keep to a minimum 'psychological' terminology, and to eliminate as far as possible the intrusiveness of statistical tables. Where it is considered appropriate these are included in the text, otherwise they will be found as appendices, with references to them within the text, for the benefit of those readers who may be concerned to know in more detail which particular statistical techniques were used in the data analysis and the results obtained.

THE PILOT STUDY IN COSTA RICA.

The initial stage of the pilot project was the translation of the original questionnaire schedules from English to Spanish. The questionnaires used in the study (in English) and a description of the scoring procedure are available as Appendices 1 (parents version) and 2 (teachers version). Certain items were changed and new items added at this point. A description of these items is available as Appendix 3.

Following the translation, the research worker at CSUCA determined the sample of children who would be assessed using the schedules. The original sample selected was 200 children from Nicaragua, El Salvador and Guatemala. Due to problems with travel within the region and, in one case, a group of refugees who were too fearful to participate in the study, the final sample was reduced to 90 children from Nicaragua and El Salvador. The countries of asylum were Costa Rica, Nicaragua and Honduras.

For each child in the study an assessment schedule and background information sheet (Appendix 4) were completed by a parent or other adult responsible for the child, and a second assessment schedule was completed by the child's teacher as all children were receiving education. It was possible, therefore, to measure levels of stress from two independent sources and, using data from the background information sheets, to investigate the effect of certain demographic variables on levels of stress.

1. DEMOGRAPHIC DATA.

Breakdown of the sample by sex, country of origin and country of asylum.

	GIRLS	BOYS
Nicaraguans in Costa Rica:	9	8
Salvadorans in Costa Rica:	2	11
Nicaraguans in Honduras:	21	18
Salvadorans in Nicaragua:	11	10
	N = 43	N = 47

The mean age of the children in the study was 9.5 years, with a range from 7 to 12 years. 88.9% of the children had been refugees for more than two years, the majority from 4 to 6 years. The mean age at which they had left their countries of origin was 5.1 years. 44% had lived as refugees in more than one location. The children came from relatively large families, with mean number of siblings 5.3.

The mother was with the child in 81 cases (90%), and the father with the child in 43 cases (46%). In 19 cases the whereabouts of the father were unknown or he was presumed deceased, in certain cases killed during the upheaval prior to flight. In almost 50% of the cases, therefore, women were caring for their children alone. Family size was increased in 41% of cases by the addition of other family members to the household e.g. grandparents, uncles, cousins.

Of the parents, 35.6% of the mothers were reported as working, and 28.9% of the fathers. Incomplete responses to these questions make it difficult to assess whether this was always paid employment e.g. it would appear that a number of the women classified household duties under this item. The majority of the parents reported that they were living in a settlement. The significant exception to this was the Nicaraguans in Honduras, who rejected the response choices on the questionnaire and reported instead that they lived in 'a refugee camp'.

65.6% of the children had been recently referred for physical illness. Diagnoses ranged from parasite infections, influenza, frequent reports of 'headache' and 'stomach ache', asthma, eye problems and, in the case of the Salvadoran children in Nicaragua, what appears to have been a recent outbreak of the common cold. One mother reported taking

her child frequently to the doctor, but he was only 'pretending' to be sick!

The most frequent reason for leaving the country of origin was reported as political oppression (63.3%), followed by civil war or disturbance (55.6%) and invasion of the country by a foreign power (22.2%). This latter response was given only by Nicaraguan refugees in Honduras. The percentages total more than 100% as a respondent could give more than one reason for leaving.

For those questions relating to scenes of civil violence that the child had witnessed, 10% of the children had witnessed the arrest of a parent or close relative, 30% had experienced a house search, 50% had witnessed fighting (including bombing) and 7.8% the murder or assassination of someone familiar to them. The overall incidence of civil violence was 88 cases, with a number of children witnessing more than one scene of civil violence.

Religion and language in the countries of asylum were reported as generally similar (93.3% and 90% respectively). This figure dropped somewhat for culture, with 62.2% of the refugees reporting the culture in the country of asylum as similar to their own.

(Frequency tables of responses to items on the background information sheet are available as Appendix 5)

2. ANALYSIS OF THE QUESTIONNAIRES.

The range of scores on the parents' questionnaire was from 6 to 44 with a mean (average) score of 25.54 (N=90). The maximum possible score = 64, minimum possible score = 0. There was no significant difference in the mean scores between boys and girls.

The range of scores on the teachers' questionnaire was from 3 to 40 with a mean score of 20.93 (N=89). The maximum possible score = 60, minimum possible score = 0. There was no significant difference in the mean scores for boys and girls.

(Frequency tables of total scores are available as Appendix 6)

A measure of agreement was calculated between the parents' and teachers' responses for the 25 items that were common to both questionnaires. The level of agreement was statistically significant in 21/25 of these items. (For chi square results see Appendix 7) This would indicate that the behaviours described in these items was consistent in the two independent sampling situations viz. at home as observed by the parents, and in school as observed by the teachers. For these 21 questions, if a particular behaviour was reported by a parent it would also most likely be reported to the same degree by the child's teacher.

An analysis was made of the mean scores on both questionnaires for the 4 groups of refugee children in the sample:

Parents' Questionnaire.

	Mean	N.
Nicaraguans in Costa Rica:	22.00	17
Salvadorans in Costa Rica:	20.59	13
Nicaraguans in Honduras:	29.54	39
Salvadorans in Nicaragua:	24.09	21

Teachers' Questionnaire.

	Mean	N.
Nicaraguans in Costa Rica;	18.29	17
Salvadorans in Costa Rica:	14.46	13
Nicaraguans in Honduras:	24.03	39
Salvadorans in Nicaragua:	21.35	20

The mean for the Nicaraguan children in Honduras on the parents' scale is significantly higher than the other three groups, and on the teachers' scale significantly higher than the Nicaraguan and Salvadoran children in Costa Rica. Within the other three groups, there is no significant difference on the parents' scale, but the mean for Salvadoran children in Nicaragua on the teachers' scale is significantly

higher than for the Salvadoran children in Costa Rica. As assessed by their parents the Nicaraguan children in Honduras are manifesting significantly higher levels of stress than the other children. The teachers' assessments are somewhat more complex and indicate more of a continuum of levels of stress within the groups than the straightforward split that is apparent from the parents' responses. (ANOVA for parents' scale = .0006. ANOVA for teachers' scale = .0019. For relevant 't' test results see Appendix 8)

With new instruments such as these questionnaires, one has no comparison data by means of which to assess whether scores are outside the normal range for the population being studied. One assumes that the instruments have at least content validity, viz. that the items are in effect adequately sampling stress-related behaviour, and this was confirmed with respect to the culture of the children in discussion with the parents and teachers prior to administration of the scales. In order to make a judgment with respect to the levels of stress that are being measured, reference can be made to similar instruments that have been standardised on different populations. These can serve initially as reference points for the purposes of organising and analysing the data in a meaningful way. Professor Michael Rutter of the Institute of Psychiatry has designed scales for parents and teachers similar to those used in this study which were standardised on a population of children in the United Kingdom. On the parents' scale designed by Professor Rutter, with a range of scores from 0 to 62, those "children with a total score of 13 or more are designated as showing some disorder". This comparison is made advisedly, but highlights the fact that, in a culture where children are not experiencing the extreme situations of forced migration, family dislocation and civil violence, a relatively low score can identify a child with behaviour problems.

In the analysis of the data from the study, we decided to look at extreme groups based on the total scores for both questionnaires. The highest 25 and lowest 25 scores on the parents' scale, and the highest 24 and lowest 24 scores on the teachers' scale were used to designate 'high' and 'low' scorers. On the parents' scale a 'high' scorer was a child with a score of 30 or more; a' low' scorer was a child with a score of 20 or below. On the teachers' scale a 'high' scorer was a child with a score of 27 or more; a low scorer was a child with a score of 15 or below. The responses for high and low scorers on each item were analysed to determine those items that discriminated between them.

Parents' Scale.

For the parents' scale, 19 of the 32 items were significant in terms of describing those children with high scores. For example 23/25

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high scorers expressed fear for their personal security, and 20/25 expressed fear for the security of their families. Of the low scorers only 2/25 expressed fear for personal security, and 7/25 fear for the security of their families. The high scorers were more likely to complain of aches and pains and fast heartbeat, to be more restless and distractible and to have more eating problems. Overall, the picture that emerges of the high scorer is that of an extremely anxious and fearful child. A full description of these 19 items with relevant statistics is available as Appendix 9.

Teachers' Scale.

From the comparison of item scores of high and low scorers on the teachers' scale, 21/30 items discriminated significantly between the two groups. Again the picture is of an anxious child. In addition, however, the teachers reported the high scorers as exhibiting more antisocial behaviour such as fighting and quarrelling with the other children; being more difficult to discipline and disobedient. They also have significantly more classroom related problems such as difficulties with memorising daily routines and learning difficulties. A full description of these 21 items with relevant statistics is available as Appendix 10.

As the mean scores for the four groups of children were significantly different, a breakdown of the high and low scorers was made by country of origin and country of asylum to see the extent to which the groups were represented in the high and low categories.

Parents' Scale.

	High Scorers		Low Scorers	
Nicaraguans in Costa Rica:	3	(12%)	9	(36%)
Salvadorans in Costa Rica:	1	(4%)	5	(20%)
Nicaraguans in Honduras:	18	(72%)	4	(16%)
Salvadorans in Nicaragua:	3	(12%)	7	(28%)
N =	25		25	

Teachers' Scale.

	High Scorers	Low Scorers
Nicaraguans in Costa Rica:	3 (12.5%)	7 (29.2%)
Salvadorans in Costa Rica:	1 (4.2%)	6 (25.0%)
Nicaraguans in Honduras:	15 (62.5%)	5 (20.8%)
Salvadorans in Nicaragua:	5 (20.8%)	6 (25.0%)
	N = 24	24

The Nicaraguan children in Honduras account for the majority of the high scorers and the minority of the low scorers on both scales. A significant number of these children appear to be manifesting extreme degrees of stress-related behaviour.

To focus only on this extreme group, however, draws attention away from the fact that overall levels of stress for the children in the study are of a high degree. If we assume that children scoring below 20 and 15 on the parents' and teachers' scales respectively are not severely stressed, then we are left with 72% of the poulation who fall above this cut-off point who, we assume, are experiencing stress to a significant degree.The consistency with which the behaviours are reported by both parents and teachers, who assessed the children independently, would appear to confirm this conclusion. Both parents and teachers, for example, reported the children as being disinterested in what is happening around them (71.6% and 81.4% respectively), and as uneasy and easily distracted (68.2% and 81.4%). They seem to have difficulty coping with their emotions and become angry easily (86.4% and 71.6%); they exhibit a need for affection and reassurance (77.3% and 72.1%). The teachers report significant numbers with learning difficulties (81.6%) and problems memorising daily routines (75%). It is difficult to imagine a situation where such behaviours would be considered as 'normal' childhood experiences.

One heare frequently in discussion of the situation of refugee children, that they are the 'future' of their communities. If their childhood is to be characterised by the experience of coping with high levels of stress, then their successful adjustment as adults is surely jeopardised unless timely interventions are effected. The results of the questionnaire analysis are particularly significant when one realises that the majority of the children have been in a refugee situation for

four to six years. The few who were relative 'newcomers' to the experience did manifest higher levels of stress, but their numbers are few. Even if we suppose that levels of stress diminish after time, the indications from the analysis are that they do not do so to the extent that they are within 'acceptable ' limits. The high degree of statistical significance that was obtained in the analysis of such a small sample supports the need for further investigation using larger samples of children in similar circumstances.

Certain other statistics that were computed on the data from this study relate to the structure of the questionnaires and a full discussion of them is not appropriate in a report of this nature. They deal with the principal components analysis to establish factors, or clusters of items that are interrelated, and item to total correlations to measure the internal consistency of the scales. Both questionnaires had primary factors describing fearful/anxious behaviour; the second factor on the parents' scale described more extrovert and attention seeking behaviour, and that for the teachers' scale described more listless behaviour and classroom-related problems.

3. THE INFLUENCE OF DEMOGRAPHIC VARIABLES ON LEVELS OF STRESS.

An understanding of the extent to which certain demographic variables can have an effect on levels of stress experienced by refugee children can serve to identify potentially vulnerable children within refugee communities, and aid in the planning of interventions that are appropriate to the needs and circumstances of particular groups.

In this study, the demographic data from the Background Information Sheet were analysed in conjunction with the results from the two questionnaires to establish those demographic variables that appear to be influencing levels of stress. Certain variables had a direct significant effect on the magnitude of the scores for the population as a whole; other effects were more complex and interactive.

A. Family Size.

Larger family size in terms of the presence of family members (grandparents, uncles, cousins) in addition to the nuclear family has a significant effect for the total sample. (ANOVA significance = .0167 for parents' scores and .0188 for teachers'). The number of siblings a child had did not affect the scores. Both parents and teachers reported higher levels of stress for children living with additional adult family members. The composition of the nuclear family was in no way different for this group; the mother was with the child in nearly all cases, and the father also with the child in the same proportion of cases as for the group of children not living with other family members. In this sense the children in this group are not experiencing any different or additional stress. Further information on cultural patterns in terms of normal family organisation would help to clarify this result. If the extended family system is not the norm for these communities, it may be that interpersonal relationships in such situations create additional pressures in circumstances that are already very difficult. In the absence of relevant information about cultural norms, and more detailed information about the functioning of these larger family groupings, one can make only suppositions. It is a point, however, that should be noted for further, more detailed investigation.

B. Civil Violence.

The incidence of civil violence that the children have witnessed by country of origin and country of asylum is as follows:

	* N/CR	S/CR	N/H	S/N
1. Arrest of parent(s) or relative:	3	1	5	0
2. House search:	2	2	10	13
3. Fighting/bombing:	11	2	28	4
4. Murder/assassination of someone familiar:	1	2	4	0
N =	17	7	47	17

* N/CR = Nicaraguans in Costa Rica
S/CR = Salvadorans in Costa Rica
N/H = Nicaraguans in Honduras
S/N = Salvadorans in Nicaragua

Overall, the experience of any form of civil violence appears to heighten the scores on both parents' and teachers' scales. Children who have not experienced civil violence constitute a significant proportion of the less-stressed children in the low-scoring category, and are the minority in the high-scoring category on both scales. Witnessing civil violence creates additional stress as revealed by the higher scores for children witnessing any of the four forms outlined in the above table. (For chi square see Appendix 11a)

The specific effect of the experience of house search, which can be a particularly brutal and terrorising experience, is apparent in the group of Salvadoran children who are refugees in Nicaragua. Within this group, those children who have experienced this form of civil violence have scores on the parents' scale significantly higher than the other Salvadorans in Nicaragua. ('t' = 3.000; df = 18; Significance = .005) The experience of fighting/bombing had an effect approaching significance for the total population. Within the group who have been most exposed to this event viz. the Nicaraguan children in Honduras, it was not possible to identify any specific effect from this experience alone. This was due to the fact that nearly all these children (36/39) have been witness to at least one form of civil violence. To compare those who had witnessed fighting with those who had not would have been an artificial distinction, as all but three of the children who had not been witness to fighting had been exposed to other forms of civil violence which doubtless had an equal impact upon them.

Experiencing any form of civil violence has an effect on the response to certain items on the questionnaires. For example, on the parents' scale, children who have witnessed civil violence are more likely to manifest repetitive behaviour, to express fears for the security of the family and to seek approval, affection and reassurance. The teachers report children who have witnessed civil violence as having more problems with memorising daily routines, being disinterested in what is happening around them and becoming angry easily. The Nicaraguan children in Honduras, who have witnessed the greatest incidence of civil violence overall, are reported by their parents as expressing significantly more fears for their personal security than the other children. (For chi square results see Appendix 11b) Despite the fact that the majority of these children have been removed from the threatening situation of civil violence for several years, they are still suffering from the impact of the events they have witnessed. The effects of traumatic events on children's behaviour is well-documented (Dodge and Raundalen 1987; Coulomme-Labarthe 1988). The distinguishing and particularly distressing feature of the traumatic events experienced by the children in this study is the element of human- to- human violence which may alter "in a much more profound way than other types of trauma a child's perception of the world". (Boothby 1986)

C. Living Conditions and Reasons for Flight.

Two further significant effects that identified higher levels of stress on both parents' and teachers' scales were the effect of living conditions (those children in a camp being more highly stressed than those in settlements), and the effect of the invasion of one's country by a foreign power. Affirmative responses to both these questions were given only by Nicaraguan refugees in Honduras (36/39 and 20/39 respectively). As there is no additional information to describe these two situations in more detail, it is not possible to conclude that these variables are significant in themselves. We cannot assume, for example, that it is the conditions in the camp in Honduras that are generating significant differences in the levels of stress manifested by the children who live there. The children in Honduras are those who have experienced most civil violence. It is most likely that it is these experiences that were a precipitating reason for flight, which are possibly interacting with living conditions and generating higher levels of stress for this group.

D. Additional Factors.

Certain other variables, although not individually reaching the required level of statistical significance, show indications of having some effect on the scores especially when interacting with other factors. For example, children who have witnessed fighting/bombing and have recently been referred for physical illness have higher scores than other children. When the culture of the host community is seen as dissimilar, girls have higher scores than boys. Dissimilarity of culture also has an interactive effect with country of asylum. Children whose families perceive the culture as different are less stressed if the country of asylum is Costa Rica (mean score = 22.75; n =20) For those in Honduras for whom the culture is different the levels of stress measured are much higher (mean score = 38.63; n = 8). It is not possible with such a small sample to compute all the possible breakdowns between different variables as the numbers in each group would be very limited. These interactions are sufficiently significant, however, to indicate that they should be followed up in future large scale studies.

4. SUMMARY AND CONCLUSIONS.

The aim of the pilot study was to evaluate the effectiveness of the two questionnaire schedules as instruments to measure stress-related behaviour in populations of refugee children. This was seen as the first step towards developing a scale that would have cross-cultural applicability in refugee situations. Additionally, we wished to better understand the extent to which particular events and conditions that the child had experienced would influence the levels of stress as measured by the two scales. The report is extensive, but it was considered essential to maximise the information available from the study in order to highlight those issues that warrant more detailed examination in future large-scale studies.

As stated earlier, certain items were included in the scales which, it was felt, were pertinent to an understanding of the ways in which refugee children would manifest stress, given the events they have witnessed and experienced. These items, most significantly those dealing with the child's fears for personal and family security, classroom-related problems and physical manifestations of stress such as shaking and fast heartbeat, were strong items on the scales. It is information such as this that seems best to capture the intensity of the refugee child's reaction to the situation of forced migration and all that this entails. (see Appendix 12)

Adult refugees considered the items on the scales to be appropriate, and representative of the sorts of behaviour observed in their children. The level of agreement attained between parents and teachers in their individual assessment of the children was very high. This agreement was in terms of both frequency and intensity of the behaviours described by the items. It implies a constancy in the child's behaviour, and is evidence of the reliability of the scales.

If the scales are indeed accurately measuring stress-related behaviours, then the results of the study indicate that the majority of the children are experiencing stress to a very high degree. Even if the scores from certain weaker items were to be discarded, they would affect the overall totals to such a minimal degree that the same conclusion would apply, viz. that the levels of stress manifested by the children in this study are unacceptably high. Their behaviour is characterised as being fearful and anxious both in the home and at school. Additionally in the classroom they have learning and memory problems and difficulties in concentrating.

The majority of the children had been refugees for some four to six years. This time factor makes it difficult to apportion 'blame' for their situation either on the events which occasioned the forced migration of their families, or the particular situation in which they now find themselves. In any event, a simplistic cause and effect model would seem to present serious drawbacks in attempting to identify the effect of specific events in generating behaviour problems in a situation as complex as that of forced migration. Certain events may doubtless be identified as having negative consequences for the children. It is important also, however, to attempt to establish the extent to which their effects are compounded by other less evident factors in the child's experience.

The analysis of the demographic data, in conjunction with the results from the questionnaires, suggests that levels of stress are more a cumulative function of the effects of several negative factors prior to and possibly during flight, and later in the camp or settlement. Witnessing civil violence, for example, certainly appears to affect levels of stress directly and it is important to understand its long-term implications for the children. It may equally interact with other events, such as physical illness, conditions in the country of asylum and altered family structure, which serve to increase still further the stress that the children are experiencing. By the same token, conditions experienced by the child upon reaching the place of safety may be such as to ameliorate rather than exacerbate the effects of these negative experiences, though one would suspect that such situations are rare.

The impact of specific events on individual children will be mediated to a greater or lesser extent by such factors as the attitude of the host society to the refugee community; the extent of the disruption in family and community life and access to social support networks for the families; the conceptualisation of their situation by the families themselves. Of great importance for the child will be the impact that forced migration has had on his/her parents, and the extent to which it may have induced adverse reactions in them personally, or altered the normal structure and balance of family relationships. (Barudy 1987)

In terms of intervention programmes, therefore, it is most important that the needs assessment of refugee populations includes an examination of all the events the children have witnessed and experienced prior to flight, and the elements in their present situation which may be having a negative effect, in order to understand how their interaction has an impact on the child's behaviour and development. Further studies are certainly necessary in order to understand better

how certain events have an effect on refugee children, and the form that intervention programmes should take to be effective in ameliorating these effects. With reference to this particular study, for example, a number of possible interventions could be suggested directed at dealing, for example, with the effects of civil violence on the children's performance in school, the effect of larger family groupings on the child's emotional behaviour, helping the children to deal with and overcome the fears and insecurities that their experiences have engendered.

What is most important to remember in conducting research of this nature, and in reading about or implementing the findings, is that the central issue is the suffering of the children, and the awful toll it is taking upon them as they attempt to cope and to adjust to the events they have witnessed. We may clothe the issue in scientific terminology, and discussion of the effectiveness of certain factors in predicting stress in different cultures. But however "culturally varied response patterns may be, the subjective impression of threat to life, limb, security or relationship will elicit some stress patterns and, for all children, violence inflicted on 'significant others' is personally and developmentally damaging." (Huyck and Fields) The children who were the 'subjects' in this study have been witness to events the awfulness of which most of us can only guess at. We have not been able to assure them a secure and happy childhood free from fear and anxiety. It is to be hoped that the effect of this and subsequent studies will be an increased understanding and awareness of their predicament that will lead to the implementation of effective measures to ameliorate their suffering.

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APPENDIX 1.

International Catholic Child Bureau,
Geneva.

Stress Assessment Schedule.

Version A. To be completed by parent or other adult responsible for the child.

Name of child.....Age:.....Sex:....

Country of origin:.....

Country where child is a refugee:.....

Relationship to child of adult completing the schedule.....

Did this person provide the background information? Yes No

1. Does the child have difficulty settling to sleep at night?	Frequently	Sometimes	Never
2. Does the child wake during the night?	Frequently	Sometimes	Never
3. Does the child wake very early in the morning?	Frequently	Sometimes	Never
4. Is the child frightened of strangers?	Frequently	Sometimes	Never
5. Does the child cry and become upset very easily?	Frequently	Sometimes	Never
6. Does the child become angry, lose his/her temper very easily?	Frequently	Sometimes	Never
7. If the child becomes upset or angry, is it difficult to comfort him/her?	Frequently	Sometimes	Never

8. Is the child calm?	Frequently	Sometimes	Never
9. Is the child shy or reserved?	Frequently	Sometimes	Never
10. Is the child reluctant to play with other children?	Frequently	Sometimes	Never
11. Does the child suffer from stomach upsets e.g. vomiting and diarrhoea?	Frequently	Sometimes	Never
12. Does the child complain of aches and pains?	Frequently	Sometimes	Never
13. Is the child afraid of the dark?	Frequently	Sometimes	Never
14. Does the child cling/show signs of fear of separation?	Frequently	Sometimes	Never
15. Does the child want to talk about the experiences that made him/her a refugee?	Frequently	Sometimes	Never
16. Does she/he like to talk about life at home?	Frequently	Sometimes	Never
17. Does the child talk about her/his present situation?	Frequently	Sometimes	Never
18. Does the child express fears for her/his own safety?	Frequently	Sometimes	Never
19. Does the child express fears for the safety of the family?	Frequently	Sometimes	Never
20. Does the child wet the bed?	Frequently	Sometimes	Never
21. Does the child bite her/his nails?	Frequently	Sometimes	Never
22. Is the child restless/easily distractible/fidgety?	Frequently	Sometimes	Never

23. Does the child ever shake or complain of fast heartbeat? Frequently Sometimes Never

24. Does the child seek approval/ affection/reassurance? Frequently Sometimes Never

25. Does the child appear disinterested in what is going on around him/her? Frequently Sometimes Never

26. Does the child reproduce situations of violence in play? Frequently Sometimes Never

27. Does the child have any tics or mannerisms? Frequently Sometimes Never

28. Does the child manifest repetitive behaviour? Frequently Sometimes Never

29. Does the child have reiterative thoughts? Frequently Sometimes Never

30. Does the child engage in destructive behaviour? Frequently Sometimes Never

31. Does the child suck his/her thumb or fingers? Frequently Sometimes Never

32. Does the child have any eating problems? Frequently Sometimes Never

If the response to Q.26 is 'Frequently' or 'Sometimes', please request further information and tick as appropriate. More than one response may be checked.

a) the child eats very little

b) asks for more than he/she can eat

c) is a fussy eater/fiddles with the food

d) has to be persuaded to eat

e) complains of tummy ache after eating

f) vomits after eating

Please add any other comments about the child's behaviour that you think would be useful. Thank you for your co-operation.

[Note for Appendix: Each questionnaire was completed in an interview situation. The interviewer read each statement and then asked the parent if he/she observed this particular behaviour in the child 'Frequently', 'Sometimes' or 'Never'.

Frequently scores 2

Sometimes scores 1

Never scores 0

Range of possible score: 0 to 64]

APPENDIX 2.

International Catholic Child Bureau,
Geneva.

Stress Assessment Schedule.

Version B. To be completed by the child's teacher.

Name of child.....Age.....Sex.....

Country of origin.....

Country where child is a refugee.....

1. Is the child frightened of strangers?	Frequently	Sometimes	Never
2. Does the child cry and become upset very easily?	Frequently	Sometimes	Never
3. Does the child become angry, lose his/her temper very easily?	Frequently	Sometimes	Never
4. If the child becomes upset or angry, is it difficult to console him/her?	Frequently	Sometimes	Never
5. Is the child calm?	Frequently	Sometimes	Never
6. Is the child shy or reserved?	Frequently	Sometimes	Never
7. Is the child reluctant to play with other children?	Frequently	Sometimes	Never
8. Does the child suffer from stomach upsets e.g. vomiting and diarrhoea?	Frequently	Sometimes	Never
9. Does the child complain of aches and pains?	Frequently	Sometimes	Never

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10. Does the child talk about the experiences that made him/her a refugee? Frequently Sometimes Never

11. Does the child talk about life at home? Frequently Sometimes Never

12. Does the child talk about her/his present situation? Frequently Sometimes Never

13. Does the child express fears for her/his own safety? Frequently Sometimes Never

14. Does the child express fears for the safety of the family? Frequently Sometimes Never

15. Does the child bite his/her nails? Frequently Sometimes Never

16. Is the child restless/ easily distractible/ fidgety? Frequently Sometimes Never

17. Does the child ever shake or complain of fast heartbeat? Frequently Sometimes Never

18. Does the child seek approval/ affection/reassurance? Frequently Sometimes Never

19. Does the child appear disinterested in what is going on around him/her? Frequently Sometimes Never

20. Does the child have any tics or mannerisms? Frequently Sometimes Never

21. Does the child manifest repetitive behaviour? Frequently Sometimes Never

22. Does the child have reiterative thoughts? Frequently Sometimes Never

23. Does the child engage in destructive behaviour? Frequently Sometimes Never

24. Does the child suck his/her thumb or fingers? Frequently Sometimes Never

25. Does the child have problems memorising daily routines in class? Frequently Sometimes Never

26. Does the child fight or quarrel with the other children? Frequently Sometimes Never

27. Is the child difficult to discipline or disobedient? Frequently Sometimes Never

28. Does the child steal? Frequently Sometimes Never

29. Does the child have learning difficulties? Frequently Sometimes Never

30. Does the child reproduce situations of violence in play? Frequently Sometimes Never

PLease add here any other comments about the child's behaviour that you think would be useful.

Thank you for your co-operation.

[Note for Appendix: Each questionnaire was completed in an interview situation. The interviewer read each statement and then asked the teacher if he/she observed this particular behaviour in the child 'Frequently', 'Sometimes' or 'Never'

Frequently scores 2

Sometimes scores 1

Never scores 0

Range of possible score: 0 to 60

APPENDIX 3.

Item changes.

a) items 8 and 9 on the parents' schedule, and 5 and 6 on the teachers' schedule were one item in the original English version viz. 'Is the child ever quiet and withdrawn?'

b) item 16 on the parents' schedule and 11 on the teachers' schedule changed its meaning in the translation. The original English item was: 'Does the child talk about what life was like at home?' In this context, 'home' was meant to refer to where the child lived prior to flight. It would appear from the back translation that it has become 'life at home',referring to the child's present experience.

c) items 28 and 29 on the parents' schedule and 21 and 22 on the teachers' schedule were one item in the original English version viz. 'Does the child engage in repetitive or obsessional behaviour?'

d) because of the particular conditions experienced by refugee children in this region, a new item was added to both schedules viz. 'Does the child reproduce situations of violence in play?'

e) an additional item was included in the teachers' schedule viz. 'Does the child have learning difficulties?'

Translation of the background information sheet (Appendix 4) involved no changes, but an additional set of questions was included viz. those referring to scenes of civil violence that the child may have witnessed.

APPENDIX 4. 1.

Background Information.

I. For children in reception/transit centres, settlements, self-settled.

Please complete this information before administering the stress assessment schedule.

Name of child.....

Age..... Sex: M F

1. Age and sex of siblings:

	Age	Sex
1.		
2.		
3.		
4.		
5.		
6.		

2. Country of Origin:.....

3. Country where child is a refugee:.....

4. Relationship to child of adult giving the information:.....

5. If the person in Q4. is NOT a family member please complete the following information:

   a) male

   b) female

   c) he/she is also a refugee: Yes No

   d) from the same country of origin as the child: Yes No

   e) speaks the same mother tongue as the child: Yes No

6. Please give details of where the child is living e.g. in a reception/transit centre, settlement, self-settled situation etc.

7. Length of time the child has been living in the situation described in Q6. Please tick as apprpriate.

   a) new arrival - less than three months

   b) 3 to 12 months

   c) 1 to 2 years

   d) 2+ years (please specify)

8. Has the child lived in any other centre as a refugee before coming to this one? Yes No

   If yes, please specify if possible the length of time and type of living conditions - e.g. whether reception/transit centre etc

9. Are both parents with the child? Yes No

   If the response is No please complete the following

   a) Mother with child

   b) Father with child

   c) Neither parent with child

10. If only one or neither parent is with the child, please complete:

    Mother: a) living in country of origin

    b) living in another country of asylum

    c) in same country of asylum, but different location

    d) whereabouts unknown

    e) presumed deceased

    f) other (please specify)

Father: a) living in country of origin

b) living in another country of asylum

c) in same country of asylum, but different location

d) whereabouts unknown

e) presumed deceased

f) other (please specify)

11. Is any other adult family member living with the child? Yes No
If Yes, please give details of the relationship(s)

12. Is the child an unaccompanied minor? Yes No
If Yes, please complete the following:

a) details of who cares for the child:

b) details, if possible, of the conditions which occasioned the separation from the parents:

13. Has the child any recent history of physical illness? Yes No

If Yes, how long since he/she was ill?.....

If the diagnosis is known, please indicate:.....

.....

14. Is the child receiving any form of education? Yes No

If Yes, please give details:

15. If the child is with his/her parent(s) do they have any form of paid employment or livelihood? Please give details as appropriate:

    Mother:

    Father:

16. How old was the child when he/she left the country of origin?.....

17. Please specify the reason(s) why the family left country of origin:

    a) Famine/Drought

    b) Natural Disaster (please specify)

    c) Civil War/Disturbance

    d) Invasion of their country by a foreign power

    e) Religious Discrimination

    f) Racial/Tribal Discrimination

    g) Political Oppression

    h) Other (please specify)

18. Has the child witnessed scenes of civil violence? Yes No
    If yes, please specify:

    a) arrest of a parent(s)/family member

    b) house search

    c) fighting/bombing

    d) murder or assassination of someone familiar to them

19. Is the culture/religion/language of the host community similar to that of the refugee community from which the child comes? Please give details as appropriate:

    a) culture similar Yes No

    b) religion similar Yes No

    c) language similar Yes No

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APPENDIX 5. 1.

Frequencies for questions on Background Information Sheet.

A. Age. Frequency.

7	16
8	12
9	16
10	16
11	13
12	17

B. No of siblings. Frequency.

0	3
1	1
2	6
3	14
4	16
5	14
6	10
7	6
8	8
9	5
10	4
11	1
12	2

C. Living Conditions.

a) settlement: 51

b) refugee camp: 36

N = 87 (No response to this question = 3)

D. Length of time in 'C'.

a) 3 to 12 months: 2

b) 1 to 2 years 7

c) 2+ years 80

N = 89 (No response to this question = 1)

E. Child had lived in another centre as a refugee.

Yes: 40

No 49

N = 89 (No response to this question = 1)

F. Location of Mother.

a) with child: 81

b) in country of origin: 5

c) in other country of asylum: 1

d) whereabouts unknown 1

e) other (mother deceased) 2

N = 90

G. Location of Father.

a) with child: 46

b) in country of origin: 14

c) in other country of asylum: 2

d) same country of asylum, different location: 3

e) whereabouts unknown: 9

f) presumed deceased: 10

g) other (father deceased) 4

N = 88 (No resonse = 2)

H. Other adult relative with child.

Yes	38
No	38
N =	76 (No response = 14)

I. Recent physical illness.

Yes	59
No	31
N =	90

J. Mother working.

Yes	32
No	48
N =	80 (No response = 10)

K. Father working.

Yes	26
No	23
N =	49 (No response = 41)

L. Age child left country of origin.

Age	Frequency
1	3
2	7
3	10
4	9
5	14
6	16
7	8
8	7
9	2
10	1
N =	77 (no response = 13)

M. Reasons for leaving country of origin.

Civil War/Disturbance:	50/90
Invasion of country by a foreign power:	20/90
Political Oppression:	57/90

N. Scenes of civil violence witnessed by the child.

arrest of parent/family member:	9/90
house search:	27/90
fighting/bombing:	45/90
murder or assassination:	7/90

Total incidence of civil violence = 88

O. Culture Similar.

Yes	56
No	28
N =	84 (No response = 6)

P. Religion Similar.

Yes	84
No	1
N =	85 (No response = 5)

Q. Language similar.

Yes	81
No	3
N =	84 (No response = 6)

Appendix 6.

1. Total Score Frequencies: Parents' Scale.

Score.	Frequency.	Score.	Frequency.
6	1	27	4
9	1	28	2
10	1	29	5
12	1	30	1
13	1	31	2
14	2	32	2
15	3	33	3
16	1	34	3
17	7	36	2
18	2	37	1
19	3	38	2
20	2	39	1
21	5	40	1
22	5	41	2
23	6	42	1
24	3	43	2
25	5	44	2
26	5		

N = 90

Mean = 25.54

Standard Deviation = 8.659

Appendix 6 (continued)

2. Total Score Frequencies: Teachers' Scale.

Score	Frequency	Score	Frequency
3	1	22	1
4	1	23	4
6	1	24	2
8	2	25	4
9	4	26	5
10	3	27	4
11	2	28	1
12	1	29	2
13	3	30	3
14	3	31	1
15	3	32	2
16	6	34	3
17	2	35	2
18	5	36	2
19	6	37	1
20	3	38	1
21	4	40	1

N = 89

Mean = 20.93

Standard Deviation = 8.582

Items with significant levels of agreement between parents and teachers.

All statistics were computed by means of a 3x3 table corresponding to the 0, 1, 2, response categories. For example, cell one frequencies equal the number of times for each item that both parent and teacher marked the 0 response category, and so on to cell nine where the frequency equals the number of times both the parent and teacher scored the child in the 2 category. Degrees of freedom = 4.

Item T1/P4. Fear of strangers.

Chi square = 22.628 N of cases = 87 Significance = .0002

Item T2/P5. Child cries, becomes upset easily.

Chi square = 28.647 N of cases = 88 Significance = .0000

Item T5/P8. Child is calm.

Chi square = 22.806 N of cases = 83 Significance = .0001

Item T6/P9. Child is shy or reserved.

Chi square = 27.912 N of cases = 87 Significance = .0000

Item T7/P10. Reluctant to play with other children.

Chi square = 20.431 N of cases = 85 Significance = .0004

Item T8/P11. Suffers from stomach upsets.

Chi sqaure = 34.832 N of cases = 85 Significance = .0000

Item T9/P12. Complains of aches and pains.

Chi square = 25.532 N of cases = 88 Significance = .0000

Item T10/P15. Talks of experiences that made him/her a refugee.

Chi square = 15.750 N of cases = 82 Significance = .0034

Item T11/P16. Talks of life at home.

Chi square = 14.441 N of cases = 85 Significance = .0060

Item T12/P17. Talks of present situation.

Chi square = 12.902 N of cases = 85 Significance = .0118

Item T14/P19. Fear for the security of the family.

Chi sqaure = 19.013 N of cases = 84 Significance = .0008

Item T15/P21. Child bites his/her nails.

Chi square = 20.612 N of cases = 85 Significance = .0004

Item T17/P23. Shakes, complains of fast heartbeat.

Chi square = 62.574 N of cases = 82 Significance = .0000

Item T18/P24. Seeks approval, affection, reassurance.

Chi square = 11.212 N of cases = 84 Significance = .0243

Item T19/P25. Disinterested in what is going on around him/her

Chi square = 13.264 N of cases = 85 Significance = .0101

Item T20/P27. Has tics/mannerisms.

Chi square = 29.264 N of cases = 81 Significance = .0000

Item T21/P28. Manifests repetitive behaviour.

Chi square = 30.587 N of cases = 80 Significance = .0000

Item T22/P29. Has reiterative thoughts.

Chi square = 37.299 N of cases = 75 Significance = .0000

Item T23/P30. Engages in destructive behaviour.

Chi square = 10.281 N of cases = 85 Significance = .0359

Item T24/P31. Sucks thumb or fingers.

Chi square = 16.224 N of cases = 84 Significance = .0027

Item T30/P26. Reproduces situations of violence in play.

Chi square = 18.593 N of cases = 86 Significance = .0009

APPENDIX 8.

Between Groups differences.

1. Parents' Scale.

Salvadorans in Costa Rica x N/CR: t = 1.4565 ns.

x S/N: t = 1.5232 ns.

x N/H: t = 3.2408 df.= 49 p < .01

Nicaraguans in Costa Rica x S/N: t = .9408 ns.

x N/H: t = 3.0123 df.= 53 p < .01

Salvadorans in Nicaragua x N/H: t = 2.4478 df.= 57 p < .02

---

2. Teachers' Scale.

Salvadorans in Costa Rica x N/CR: t = 1.4564 ns.

x S/N: t = 2.4847 df.= 31 p < .01

x N/H: t = 3.7962 df.= 49 p < .001

Nicaraguans in Costa Rica x S/N: t = 1.2492 ns.

x N/H: t = 2.6547 df.= 53 p < .01

Salvadorans in Nicaragua x N/H: t = 1.3543 ns.

N/CR = Nicaraguans in Costa Rica

S/N = Salvadorans in Nicaragua

N/H = Nicaraguans in Honduras

APPENDIX 9. 1.

Items that discriminate significantly between 'high' and 'low scorers on the parents' scale.

All statistics were computed by means of a 2x2 table corresponding to the presence (2 and 1 scores combined) or absence (0score) of the particular behaviour in the two groups. For example, cell one frequencies equal the number of times 'low' scorers received a zero; cell four frequencies equal the number of times the behaviour was observed for 'high' scorers. Degrees of freedom = 1.

P1. Difficulty settling to sleep.

Chi Square = 23.269 N of cases = 50 Significance = .0000

P2. Wakes during the night.

Chi Square = 11.538 N of cases = 50 Significance = .0007

P5. Cries, becomes upset easily.

Chi Square = 5.556 N of cases = 50 Significance = .0184

P6. Becomes angry, loses temper easily.

Chi Square = 7.453 N of cases = 48 Significance = .0063

P7. Difficult to comfort if upset or angry.

Chi Square = 11.011 N of cases = 49 Significance = .0009

P10. Reluctant to play with other children.

Chi Square = 11.153 N of cases = 49 Significance = .0008

P11. Suffers from stomach upsets.

Chi Square = 9.442 N of cases = 49 Significance = .0021

P12. Complains of aches and pains.

Chi Square = 15.062 N of cases = 50 Significance = .0001

P13. Afraid of the dark.

Chi Square = 15.393 N of cases = 48 Significance = .0001

P14. Fear of separation.

Chi Square = 9.900 N of cases = 49 Significance = .0017

P18. Fears for personal security.

Chi Square = 33.310 N of cases = 48 Significance = .0000

P19. Fears for family security.

Chi Square = 11.959 N of cases = 48 Significance = .0005

P21. Wets the bed.

Chi Square = 12.070 N of cases = 49 Significance = .0005

P22. Restless/easily distractible/fidgety.

Chi Square = 14.107 N of cases = 49 Significance = .0002

P23. Shakes, complains of fast heartbeat.

Chi Square = 12.789 N of cases = 49 Significance = .0003

P24. Seeks approval/affection/reassurance.

Chi Square = 6.572 N of cases = 48 Significance = .0104

P27. Has tics or mannerisms.

Chi Square = 9.581 N of cases = 47 Significance = .0020

P29. Has reiterative thoughts.

Chi Square = 7.894 N of cases = 43 Significance = .0050

P32. Has eating problems.

Chi square = 22.400 N of cases = 49 Significance = .0000

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APPENDIX 10. 1.

Items that discriminate significantly between 'high' and 'low' scorers on the teachers' scale.

All statistics were computed by means of a 2x2 table corresponding to the presence (2 and 1 scores combined) or absence (0 score) of the particular behaviour in the two groups. For example, cell one frequrencies equal the number of times 'low' scorers received a zero; cell four frequencies equal the number of times the behaviour was obserevd for 'high' scorers. Degrees of freedom = 1.

T2. Cries becomes upset easily.

Chi Square = 9.368 N of cases = 47 Significance = .0022

T3. Becomes angry easily.

Chi Square = 15.443 N of cases = 47 Significance = .0001

T4. Difficult to comfort.

Chi Square = 10.850 N of cases =46 Significance = .0010

T7. Reluctant to play with other children.

Chi square = 7.769 N of cases = 45 Significance = .0053

T8. Has stomach upsets.
Chi Square = 19.368 N of cases = 45 Significance = .0000

T9. Complains of aches and pains.

Chi Square = 14.696 N of cases = 46 Significance = .0001

T10. Talks of experiences that made him/her a refugee.

Chi Square =10.672 N of cases = 45 Significance = .0011

T11. Talks of life at home.

Chi Square = 11.790 N of cases = 45 Significance = .0006

T12. Talks of present situation.

Chi Square = 17.134 N of cases = 45 Significance = .0000

T13. Fears for personal security.

Chi Square = 14.418 N of cases = 45 Significance = .0001

T14. Fears for the security of the family.

Chi Square = 24.418 N of cases = 45 Significance = .0000

T17. Shakes, complains of fast heartbeat.

Chi Square = 12.506 N of cases = 44 Significance = .0004

T19. Disinterested in what is happening around him/her.

Chi Square = 11.458 N of cases = 44 Significance = .0007

T20. Has tics, mannerisms.

Chi Square = 27.704 N of cases = 44 Significance = .0000

T21. Manifests repetitive behaviour.

Chi Square = 19.570 N of cases = 43 Significance = .0000

T22. Has reiterative thoughts.

Chi Square = 17.031 N of cases = 39 Significance = .0000

T25. Problems memorising daily routines.

Chi Square = 17.094 N of cases = 44 Significance = .0000

T26. Fights or quarrels with other children.

Chi Square = 12.024 N of cases = 45 Significance = .0005

T27. Difficult to discipline/disobedient.

Chi square = 6.505 N of cases = 45 Significance = .0108

T29. Has learning difficulties.

Chi Square = 13.442 N of cases = 45 Significance = .0002

T30. Reproduces situations of violence in play.

Chi Square = 11.745 N of cases = 45 Significance = .0006

A. Parents' questionnaire: Item to total correlations. (Pearson's 'r')

Item.			Item.		
1.	.5029	P = .000	2.	.3728	P = .000
3.	.1961	P = .033	4.	.2745	P = .005
5.	.3772	P = .000	6.	.3964	P = .000
7.	.4585	P =. 000	8.	.0618	P = .287
9.	.3152	P = .001	10.	.3931	P = .000
11.	.4745	P = .000	12.	.5204	P = .000
13.	.4938	P = .000	14.	.4073	P = .000
15.	.2426	P = .013	16.	.1787	P = .048
17.	.2133	P = .023	18.	.5861	P = .000
19.	.4182	P = .000	20.	.2849	P = .004
21.	.3431	P = .001	22.	.5532	P = .000
23.	.5040	P = .000	24.	.2072	P = .026
25.	.2144	P = .022	26.	.2754	P = .005
27.	.3445	P = .001	28.	.3262	P = .001
29.	.2344	P = .018	30.	-.0079	P = .471
31.	.2371	P = .013	32.	.4535	P = .000

B. Teachers' questionnaire: Item to total correlations. (Pearson's 'r')

Item.			Item.		
1.	.2030	P = .029	2.	.4330	P = .000
3.	.5759	P = .000	4.	.4548	P = .000
5.	-.1351	P = .109	6.	.3159	P = .001
7.	.3875	P = .000	8.	.5174	P = .000
9.	.5206	P = .000	10.	.3924	P = .000
11.	.4051	P = .000	12.	.5337	P = .000
13.	.5138	P = .000	14.	.5712	P = .000
15.	.2241	P = .019	16.	.4192	P = .000
17.	.4901	P = .000	18.	.3240	P = .001
19.	.3045	P = .002	20.	.6065	P = .000
21.	.4375	P = .000	22.	.4599	P = .000
23.	.3227	P = .001	24.	.1954	P = .036
25.	.5910	P = .000	26.	.4855	P = .000
27.	.3858	P = .000	28.	.1281	P = .121
29.	.4999	P = .000	30.	.4820	P = .000

APPENDIX 11.

Chi Square Results for the Effects of Civil Violence.

a. Children who have not witnessed civil violence in the 'low' scoring categories.

Parents' scale chi square = 6.550 N of cases = 89 $p < .01$ df = 1

Teachers' scale chi square = 14.453 N of cases = 88 $p < .001$ df = 1

b. Experience of civil violence in relation to specific items.

Parents' scale.

i. Manifests repetitive behaviour.

Chi square = 7.018 N of cases = 89 $p < .01$ df = 1

ii. Fears for the security of the family.

Chi square = 7.156 N of cases = 89 $p < .01$ df = 1

iii. Seeks approval, affection. reassurance.

Chi square = 8.358 N of cases = 89 $p < .01$ df = 1

Teachers' scale.

i. Problems memorising daily routines.

Chi square = 4.482 N of cases = 88 $p < .05$ df = 1

ii. Becomes angry easily.

Chi square = 6.329 N of cases = 88 $p < .01$ df = 1

iii. Disinterested in what is happening around him/her.

Chi square = 6.797 N of cases = 88 $p < .01$ df = 1.